CHART 11491 (SIDE A) NM 14/00

ST. JOHNS RIVER CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF OCT 1997
AND SURVEYS TO JUN 1999

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
ST. JOHNS BAR CUT RANGE, EAST SECTION	39.7	41.4	41.5	37.5	1-97	800	2.1	42
ST. JOHNS BAR CUT RANGE, WEST SECTION	39.6	39.7	39.7	39.2	12-98,1-99	800	1.5	38
PILOT TOWN CUT RANGE	37.4	39.3	39.6	36.0	12-98,3-99	950	1.0	38
MAYPORT CUT RANGE	38.2	39.1	39.2	37.5	3-99,5-99	1050	0.7	38
SHERMAN CUT RANGE	39.2	39.1	39.2	36.3	5-99	950-650	0.5	38
MILE POINT LOWER RANGE AND TURN	38.1	37.3	37.2	33.1	5-99,6-99	650	0.9	38
TRAINING WALL REACH	38.4	38.1	39.1	38.5	1-97	650-500	1.1	38
SHORT CUT TURN	36.9	40.3	41.6	40.7	1-97,6-99	600	0.4	38
WHITE SHELLS CUT RANGE	36.5	38.8	38.6	40.7	1-97,6-99	580-1280	0.7	38
ST. JOHNS BLUFF REACH	37.7	38.0	37.6	37.8	6-99	1200-1100	0.6	38
DAMES PT.-FULTON CUTOFF	37.4	38.2	38.2	36.6	8-97,6-99	1280-500	2.7	38
DAMES PT. TURN	37.1	37.5	37.4	27.7	4-96	900-1200	0.4	38
QUARANTINE I. UPPER RANGE	39.4	38.7	39.2	39.3	8-97	1000-550	0.7	38
BRILLS CUT RANGE	38.2	38.8	38.1	38.2	8-97	550-450	0.8	38
BROWARD POINT TURN	38.6	38.1	38.8	38.3	8-97	625-850	1.0	38
BLOUNT ISLAND CHANNEL	22.8	19.5	19.9	23.6	8-97	300-800	1.7	30

NOTE: THE RANGE LIGHTS DO NOT IN EVERY INSTANCE MARK THE CENTERLINE OF THE CHANNEL.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 11537 NM 14/00

CAPE FEAR RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JAN 2000

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
BALDHEAD SHOAL	37.4	38.3	39.2	37.5	6-99	500	3.0	40
SMITH ISLAND	20.9	33.3	41.1	39.5	12-99	500	1.0	40
BALDHEAD CASWELL CHANNEL	35.2	40.4	41.0	42.9	12-99	500	0.4	40
SOUTHPORT CHANNEL	42.3	42.1	37.2	33.0	2-99	500	1.0	40
BATTERY ISLAND CHANNEL	44.2	46.3	39.8	32.3	2-98	500	0.5	40
LOWER SWASH	36.0	38.5	39.8	35.7	3-99	400	1.6	38
SNOWS MARSH	35.1	38.8	37.3	36.9	2-99	400	3.1	38
HORSESHOE SHOAL	33.9	38.0	37.5	37.2	12-99	400	1.2	38
REAVES POINT	37.4	38.0	37.8	36.5	12-99	400	1.2	38
LOWER MIDNIGHT	36.9	39.2	39.9	38.0	4-99	400	1.6	38
UPPER MIDNIGHT	35.8	37.9	37.4	35.1	12-99	400	2.7	38
LOWER LILLIPUT	35.8	38.3	38.1	37.0	12-99	400	1.9	38
UPPER LILLIPUT	35.8	36.7	38.1	37.1	11-99	400	1.9	38
KEG ISLAND	36.0	38.4	37.8	32.8	10-99	400	1.4	38
BIG ISLAND LOWER	35.1	37.1	36.6	33.5	10-99	400	0.8	38
BIG ISLAND UPPER	37.7	38.2	38.5	33.4	11-99	400	0.5	38
LOWER BRUNSWICK	31.5	37.9	38.0	34.8	11-99	400	1.6	38
UPPER BRUNSWICK	32.4	39.1	39.3	35.3	11-99	400	1.0	38
FOURTH EAST JETTY	37.7	38.2	37.7	36.6	11-99	400	1.2	38
BETWEEN CHANNEL	35.4	40.3	38.7	33.9	11-99	550	0.8	38
ANCHORAGE BASIN & APP CHANNEL	25.0	32.1	32.4	26.1	12-99,1-00	450-1090	1.3	38
HWY 74-76 TO BATTLESHIP	30.7	32.9	36.2	29.0	12-99	400	0.6	32
BATTLESHIP TO HWY 117 INCLUDING TURNING BASIN	8.6	30.0	32.2	29.4	3-99,11-99	190-850	-	32
HWY 117 TO HILTON BR	28.1	29.6	31.8	26.7	3-99	200-400	0.5	32
THENCE TO END OF PROJECT AT 34°16'36"N, 77°57'01"W	23.1	23.6A	23.5B	21.9C	6-99	200	1.2	25
TURNING BASIN	24.6	21.0	22.2	16.1	6-99	500	0.1	25

A. EXCEPT FOR SHOALING TO 21.4 FEET FOR THE LAST 150 FEET OF THE PROJECT.
B. EXCEPT FOR SHOALING TO 16.4 FEET FOR THE LAST 150 FEET OF THE PROJECT.
C. EXCEPT FOR SHOALING TO 10.2 FEET FOR THE LAST 150 FEET OF THE PROJECT.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 12251 (SIDE B) NM 14/00

JAMES RIVER

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF DEC 1999 AND SURVEYS TO OCT 1999

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)

NAME OF CHANNEL	DEPTH MLLW (FEET)	WIDTH (FEET)	DATE OF SURVEY
HOPEWELL TO RICHMOND			
DEEPWATER TERMINAL	20.3	200	2,10-98
37°27'05.0"N, 77°25'07.4"W			
CHANNEL ADJOINING TURNING BASIN	22.4	200	12-98
TURNING BASIN	23.8	385	12-98
THENCE TO RICHMOND			
HARBOR TURNING BASIN	16.9	200	10-99
TURNING BASIN	16.6	140-175	10-99
THENCE TO 37°31'29.0"N, 77°25'14.5"W	17.8	200	10-99

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGING CONDITIONS SUBSEQUENT TO THE ABOVE

CHART 12311 NM 14/00

CHRISTINA RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF FEB 2000 AND SURVEYS TO JAN 2000

	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT CHRISTINA RIVER DATUM				PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT MILES)	DEPTH (FEET)
ENTRANCE CHANNEL TO THE UPPER END OF THE TURNING BASIN	33.6	33.1	31.9	1-00	500-340	0.70	38
THENCE TO THE LOBDELL CANAL	28.6	30.3	28.6	1-00	400	0.33	35
TURNING BASIN (OPPOSITE TERMINAL WHARF)	30.1	30.1	30.1	1-00	320	0.34	38

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 12312 NM 14/00

CHRISTINA RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF FEB 2000 AND SURVEYS TO JAN 2000

	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT CHRISTINA RIVER DATUM				PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT MILES)	DEPTH (FEET)
ENTRANCE CHANNEL TO THE UPPER END OF THE TURNING BASIN	33.6	33.1	31.9	1-00	500-340	0.70	38
THENCE TO THE LOBDELL CANAL	28.6	30.3	28.6	1-00	400	0.33	35
TURNING BASIN (OPPOSITE TERMINAL WHARF)	30.1	30.1	30.1	1-00	320	0.34	38

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 12324 (SIDE A) NM 14/00

SANDY HOOK BAY, SHREWSBURY AND NAVESINK RIVERS CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO APR 1999

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)

NAME OF CHANNEL	DEPTH MLLW (FEET)	WIDTH (FEET)	DATE OF SURVEY
SANDY HOOK BAY			
TERMINAL CHANNEL	44.0	400	2-97
SHREWSBURY RIVER			
HIGHLANDS REACH	9.8	150	4-99
RUMSON REACH	5.9	150	4-99
LONG BRANCH REACH	5.9	150	4-99
NAVESINK RIVER			
BARLEY POINT REACH	4.3	150	4-99
FAIR HAVEN REACH			
(PARTIALLY NATURAL CHANNEL)	4.3	150	4-99
RED BANK REACH	6.0	150	4-99

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGING CONDITIONS SUBSEQUENT TO THE ABOVE

CHART 13221 NM 14/00

PROVIDENCE RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JAN 2000 AND SURVEYS TO MAY - AUG 1999

	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
ENTRANCE CHANNEL	38.0	38.0	38.0	38.0	5,8-99	600-1700	5.4	40
RUMSTICK NECK REACH	33.5	39.2	39.5	33.1	5,8-99	600	2.2	40
CONIMICUT PT. REACH	31.3	37.3	40.8	31.9	5,8-99	600	1.0	40
BULLOCK PT. REACH	29.7	35.4	36.3	30.3	5,8-99	600	2.1	40
SABIN PT. REACH	24.4	33.1	36.2	26.0	5,8-99	600	1.0	40
FULLER ROCK REACH	25.2	30.6	33.1	26.8	5,8-99	600-1000	1.0	40
FOX POINT REACH	28.7	29.1	29.0	26.4	5,8-99	600-1700	1.5	40

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 13224 NM 14/00

PROVIDENCE RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JAN 2000 AND SURVEYS TO MAY - AUG 1999

	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
ENTRANCE CHANNEL	38.0	38.0	38.0	38.0	5,8-99	600-1700	5.4	40
RUMSTICK NECK REACH	33.5	39.2	39.5	33.1	5,8-99	600	2.2	40
CONIMICUT PT. REACH	31.3	37.3	40.8	31.9	5,8-99	600	1.0	40
BULLOCK PT. REACH	29.7	35.4	36.3	30.3	5,8-99	600	2.1	40
SABIN PT. REACH	24.4	33.1	36.2	26.0	5,8-99	600	1.0	40
FULLER ROCK REACH	25.2	30.6	33.1	26.8	5,8-99	600-1000	1.0	40
FOX POINT REACH	28.7	29.1	29.0	26.4	5,8-99	600-1700	1.5	40

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 13225 NM 14/00

PROVIDENCE RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JAN 2000 AND SURVEYS TO MAY - AUG 1999

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
SABIN PT. REACH	24.4	33.1	36.2	26.0	5,8-99	600	1.0	40
FULLER ROCK REACH	25.2	30.6	33.1	26.8	5,8-99	600-1000	1.0	40
FOX POINT REACH	28.7	29.1	29.0	26.4	5,8-99	600-1700	1.5	40

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 14842 (PAGE 26) NM 14/00

SANDUSKY HARBOR CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUN 1999

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT GREAT LAKES LOW WATER DATUM (LWD)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH LWD (FEET)
MOSELEY CHANNEL	22.7	24.9	25.5	A14.1	3-98, 6-99	400	2.15	26
UPPER STRAIGHT CHANNEL	20.7	23.7	23.4	B21.8	6-99	400	1.04	25
UPPER BAY CHANNEL	C23.4	24.5	22.5	D20.8	6-99	300	1.64	25
LOWER BAY CHANNEL	21.6	23.2	23.1	21.8	6-99	350	.24	24
TURNING BASIN	18.1	21.9	22.7	21.7	6-99	300-1725	.50	24
DOCK CHANNEL	17.6	19.7	20.3	17.7	6-99	300	1.10	22
LOWER STRAIGHT CHANNEL	E17.0	18.6	18.4	F17.9	6-99	400	.77	21

A. EXCEPT FOR SHOALING TO 8.1 FEET IN THE VICINITY OF BUOY 10.
B. 14.1 FEET AVAILABLE IN THE RIGHT OUTSIDE HALF OF THE QUARTER.
C. 16.4 FEET AVAILABLE IN THE LEFT OUTSIDE HALF OF THE QUARTER.
D. 14.0 FEET AVAILABLE IN THE RIGHT OUTSIDE HALF OF THE QUARTER.
E. 11.3 FEET AVAILABLE IN THE LEFT OUTSIDE HALF OF THE QUARTER.
F. 14.9 FEET AVAILABLE IN THE RIGHT OUTSIDE HALF OF THE QUARTER.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 14844 NM 14/00

SANDUSKY HARBOR CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUN 1999

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT GREAT LAKES LOW WATER DATUM (LWD)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH LWD (FEET)
MOSELEY CHANNEL	22.7	24.9	25.5	A14.1	3-98, 6-99	400	2.15	26
UPPER STRAIGHT CHANNEL	20.7	23.7	23.4	B21.8	6-99	400	1.04	25
UPPER BAY CHANNEL	C23.4	24.5	22.5	D20.8	6-99	300	1.64	25
LOWER BAY CHANNEL	21.6	23.2	23.1	21.8	6-99	350	.24	24
TURNING BASIN	18.1	21.9	22.7	21.7	6-99	300-1725	.50	24
DOCK CHANNEL	17.6	19.7	20.3	17.7	6-99	300	1.10	22
LOWER STRAIGHT CHANNEL	E17.0	18.6	18.4	F17.9	6-99	400	.77	21

A. EXCEPT FOR SHOALING TO 8.1 FEET IN THE VICINITY OF BUOY 10.
B. 14.1 FEET AVAILABLE IN THE RIGHT OUTSIDE HALF OF THE QUARTER.
C. 16.4 FEET AVAILABLE IN THE LEFT OUTSIDE HALF OF THE QUARTER.
D. 14.0 FEET AVAILABLE IN THE RIGHT OUTSIDE HALF OF THE QUARTER.
E. 11.3 FEET AVAILABLE IN THE LEFT OUTSIDE HALF OF THE QUARTER.
F. 14.9 FEET AVAILABLE IN THE RIGHT OUTSIDE HALF OF THE QUARTER.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 14845 NM 14/00

SANDUSKY HARBOR CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUN 1999

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT GREAT LAKES LOW WATER DATUM (LWD)				DATE OF SURVEY	PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER		WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH LWD (FEET)
MOSELEY CHANNEL	22.7	24.9	25.5	A14.1	3-98, 6-99	400	2.15	26
UPPER STRAIGHT CHANNEL	20.7	23.7	23.4	B21.8	6-99	400	1.04	25
UPPER BAY CHANNEL	C23.4	24.5	22.5	D20.8	6-99	300	1.64	25
LOWER BAY CHANNEL	21.6	23.2	23.1	21.8	6-99	350	.24	24
TURNING BASIN	18.1	21.9	22.7	21.7	6-99	300-1725	.50	24
DOCK CHANNEL	17.6	19.7	20.3	17.7	6-99	300	1.10	22
LOWER STRAIGHT CHANNEL	E17.0	18.6	18.4	F17.9	6-99	400	.77	21

A. EXCEPT FOR SHOALING TO 8.1 FEET IN THE VICINITY OF BUOY 10.
B. 14.1 FEET AVAILABLE IN THE RIGHT OUTSIDE HALF OF THE QUARTER.
C. 16.4 FEET AVAILABLE IN THE LEFT OUTSIDE HALF OF THE QUARTER.
D. 14.0 FEET AVAILABLE IN THE RIGHT OUTSIDE HALF OF THE QUARTER.
E. 11.3 FEET AVAILABLE IN THE LEFT OUTSIDE HALF OF THE QUARTER.
F. 14.9 FEET AVAILABLE IN THE RIGHT OUTSIDE HALF OF THE QUARTER.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION